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Socio-Economic Impact Study: Proposed Amendment to Regulation 8, Rule 45 **Motor Vehicle and Motor Equipment Coating Operations**

> Submitted to: Bay Area Air Quality Management District

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Executive Summary

The Bay Area Air Quality Management District (BAAQMD) regulates emissions of volatile organic compounds (VOC) associated with automotive refinishing operations through Regulation 8, Rule 45: Motor Vehicle and Mobile Equipment Coating Operations (Rule 8-45). Currently, the BAAQMD is proposing to amend Rule 8-45, to further reduce VOC emissions from automotive refinishing operations to achieve a 3.7 tpd or about 63 percent of the Bay Area automotive refinishing emissions reduction.

Socio-Economic Impacts

In order to estimate the economic impacts of amending Rule 8-45 on the affected industries, this report compares the affected industry's annualized compliance costs with its profit ratios. The analysis uses data from the BAAQMD, US Census County Business Patterns, the IRS, and Dun and Bradstreet, a private data vendor.

Economic Profile of Affected Industries

The BAAQMD identifies the affected industries as Coating Manufacturers (SIC 2851), and Automotive Refinishing Facilities (NAICS 811121/SIC 7532). According to BAAQMD records, no coating manufacturing companies are located in the Bay Area. However, there are over 1,100 automotive refinishing facilities, which include auto body repair shops, automotive paint shops, auto dealerships, public transit agencies, airports, public work departments, and educational facilities. In addition, the District includes an additional 200 mobile automotive refinishers.

Economic Impacts to Affected Industries

IRS data indicate that firms in the automotive repair and maintenance sector, which includes the affected industries, earn 4.2 percent profits on total revenue, resulting in total industry net profits of \$16.7 million. According to updated BAAQMD data, the total annualized compliance costs will be approximately \$1.2 million. Dividing the compliance costs (\$1.2 million) by annual profits (\$16.7 million) shows that the proposed Rule would result in a 7.1 percent reduction in firm profits. Although this is well below the ARB's 10 percent threshold, the smallest firms could incur impacts up to 19.5 percent.

In order to fully mitigate these impacts, firms would need to increase consumer repair charges between one and \$18, with a six dollar average increase. These increases represent less than one percent of total repair charges, which average \$2,200. The ARB and the BAAQMD conclude that firms could easily pass these charges along to consumers. Thus, the proposed Rule amendment should not adversely impact affected industry firms.

Regional Employment, Indirect, and Induced Impacts

Since on average, the proposed amendment to Rule 8-45 would not result in significant economic impacts to firms within the affected industries, and consumers and insurance companies will likely bear the compliance cost burden, the proposed amendment would not impact affected industry or regional employment. In addition, adoption of the proposed Rule amendment would not result in any additional regional spinoff, or multiplier, impacts.

Impacts to Small Businesses

Using the California Government Code 14835's definition of a small business, approximately 99.8 percent of all affected firms are small businesses. However, as the BAAQMD and this analysis both conclude that compliance costs are small enough to pass along to consumers without impacting the firms' competitiveness, amending Rule 8-45 would not adversely impact small businesses.

Description of Proposed Rule

Since 1989, the Bay Area Air Quality Management District (BAAQMD) has regulated emissions from volatile organic compounds (VOC) associated with automotive refinishing operations through Regulation 8, Rule 45: Motor Vehicle and Mobile Equipment Coating Operations (Rule 8-45). The rule, which has been amended twice since its initial adoption, sets VOC limits on various types of paints and surface preparation solvents used in automotive refinishing. The rule also requires the use of spray technology that maximizes the amount of paint that adheres to the intended surface and minimizes overspray.

BAAQMD proposes to amend Rule 8-45, to further reduce VOC emissions from automotive refinishing operations. The amendment incorporates lower VOC limits and new operational standards outlined in the California Air Resources Board (ARB) Suggested Control Measure for Automotive Coatings (SCM), which was developed in 2005 as a guideline for air districts amending their automotive refinishing rules. The proposed VOC limits for different coating categories are presented in Table 1.

Table 1: Proposed Coating Categories and VOC Limits

Coating Category	VOC Limits (g/l)	
Clear Coating	250	
Color Coating	420	
Multi-Color Coating	680	
Pretreatment Coating	660	
Temporary Protective Coating	60	
Truck Bed Liner Coating	310	
Underbody Coating	430	
Uniform Finish Coating	540	
Any other Coating Type	250	
All Solvents	25	
Adhesion Promoter	540	
Primer	250	
Single-Stage Coating	340	

Source: Bay Area Air Quality Management District, 2008; BAE, 2008

The proposed amendment to Rule 8-45 would require automotive refinishing operations to use coatings that comply with the mass-based VOC limits by October 1, 2009 (January 1, 2010 for some coatings). Automotive refinishing operations take place at auto body repair and paint shops,

production auto body paint shops, auto dealership repair and paint shops, fleet operator repair and paint shops, and by mobile refinishers who travel to various sites and do limited body work and repainting at those locations. Mobile refinishers often provide services to car dealerships and at facilities that operate fleets of vehicles, like rental car agencies, and government agencies. Motor vehicle and mobile equipment coating subject to Rule 8-45 also occurs during the manufacture of heavy duty trucks, trailers, buses, trains, utility bodies, and camper shells.

In addition to reducing VOC limits, the proposed amendment would create new administrative requirements for mobile refinishing operations. Mobile refinishers would be required to register with the District annually. Furthermore, frequent clients of mobile refinishers, such as auto dealerships, would be required to keep records of mobile refinisher visits.

Currently, VOC emissions from automotive refinishing operations in the Bay Area total 5.8 tons per day (tpd). This includes approximately 3.99 tpd of VOC emissions associated with automotive coating and 1.83 tpd from clean-up and surface preparation solvent use at automotive refinishing operations. The proposed amendment to Rule 8-45 would achieve a reduction in VOC emissions of 3.7 tpd or about 63 percent of the Bay Area automotive refinishing emissions.

Regional Trends

This section provides background information on the demographic and economic trends for the San Francisco Bay Area, which represents the BAAQMD jurisdiction. The BAAQMD includes Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and the southern portions of Solano, and Sonoma Counties. Regional trends are compared to statewide demographic and economic patterns since 2000, in order to show the region's unique characteristics relative to the State.

Regional Demographic Trends

Table 2 shows the population and household trends for the nine county Bay Area and California between 2000 and 2008. During this time, the Bay Area's population increased by 7.6 percent, compared to 12.3 percent in California. Likewise, the number of Bay Area households grew by 7.2 percent, compared to a ten percent statewide increase.

Table 2: Population and Household Trends, 2000-2008									
Bay Area (a)	2000	(est.)	Total Change 2000-2008	Percent Change 2000-2008					
Population	6,784,348	7,301,080	516,732	7.6%					
Households	2,466,020	2,643,390	177,370	7.2%					
Average Household Size	2.69	2.71							
California									
Population	33,873,086	38,049,462	4,176,376	12.3%					
Households	11,502,871	12,653,045	1,150,174	10.0%					
Average Household Size	2.87	2.94							

Notes:

(a) Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties.

Sources: California, Department of Finance, 2008; Claritas, 2008; BAE 2008.

The slower growth in the Bay Area is related to its relatively built out environment, compared to the state overall. While central valley locations, such as the Sacramento region, experienced large increases in the number of housing units, the Bay Area, which was relatively built out before the housing boom, only experienced moderate increases in housing units.

Regional Economic Trends

In the five-year period, between the third quarters of 2002 and 2007, the Bay Area's economic base grew by only one percent, increasing from 3.29 million jobs to 3.32 million jobs. This represents slightly slower job growth than the State, which grew by five percent.

Manufacturing, Retail Trade, and Professional, Scientific, and Technical Services, the largest private (non-government) sectors in the Bay Area's economy, each constituted ten percent of the region's total jobs in 2007. Over the five-year period the Manufacturing sector lost 14 percent of its jobs, while the Retail Trade sector was relatively stagnant, experiencing no growth. However, during this period, the Professional, Scientific, and Technical Services sector grew by 13 percent. Statewide, the Manufacturing sector declined by 11 percent while Retail Trade and Professional, Scientific, and Technical Services grew by six and 18 percent, respectively. Overall, the Bay Area's economic base reflects the state's base, sharing a similar distribution of employment across sectors. Table 3 shows the jobs by sector in 2003 and 2007.

The affected industries, Paint and Coating Manufacturers, and Automotive Body, Paint, and Interior Repair and Maintenance, fall into the Manufacturing and Other Services, except Public Administration sectors, respectively. While manufacturing represents a relatively large portion of the region's job base, employment contracted between 2002 and 2007.

In 2007, the Other Services except Public Administration sector represented four percent of the region's job base, and five percent of the state's job base. However, the region's sector experienced slower growth between 2002 and 2007, increasing by nine percent, compared to 16 percent statewide.

Table 3: Jobs by Sector, 2002-2007 (a)

			Bay Area	а				California		
	Q3 200)2 (b)	Q3 200	7 (c)	% Change	Q3 2002	(b)	Q3 200	7 (c)	% Change
Industry Sector	Jobs	% Total	Jobs	% Total	2002-2007	Jobs	% Total	Jobs	% Total	2002-2007
Agriculture Forestry Fishing and Hunting	22.400	1%	22.751	1%	3%	442.760	3%	441.795	3%	00/
Agriculture, Forestry, Fishing and Hunting	22,190		22,751			443,760		,		0%
Mining	1,979	0%	2,132	0%	8%	20,848	0%	25,337	0%	22%
Construction	188,424	6%	198,440	6%	5%	788,601	5%	910,188	6%	15%
Manufacturing	402,800	12%	348,278	10%	-14%	1,641,249	11%	1,466,834	9%	-11%
Utilities	3,990	0%	5,843	0%	46%	54,731	0%	58,097	0%	6%
Wholesale Trade	114,575	3%	125,247	4%	9%	648,400	4%	719,879	5%	11%
Retail Trade	338,662	10%	338,591	10%	0%	1,574,357	11%	1,674,276	11%	6%
Transportation and Warehousing	53,648	2%	54,487	2%	2%	422,830	3%	431,593	3%	2%
Information	121,215	4%	114,415	3%	-6%	489,032	3%	475,166	3%	-3%
Finance and Insurance	147,341	4%	147,137	4%	0%	578,872	4%	614,055	4%	6%
Real Estate and Rental and Leasing	62,440	2%	59,665	2%	-4%	271,219	2%	283,925	2%	5%
Professional, Scientific, and Technical Services	291,463	9%	330,575	10%	13%	900,581	6%	1,059,422	7%	18%
Management of Companies and Enterprises	72,230	2%	58,996	2%	-18%	272,607	2%	206,120	1%	-24%
Administrative and Waste Services	182,563	6%	194,079	6%	6%	953,432	6%	1,000,102	6%	5%
Educational Services	61,709	2%	70,488	2%	14%	210,216	1%	243,996	2%	16%
Health Care and Social Assistance	286,553	9%	297,223	9%	4%	1,251,628	8%	1,374,102	9%	10%
Arts. Entertainment, and Recreation	53.410	2%	55.790	2%	4%	239.946	2%	260.712	2%	9%
Accommodation and Food Services	254,681	8%	283.526	9%	11%	1,163,214	8%	1,321,331	8%	14%
Other Services, except Public Administration	135,387	4%	147,552	4%	9%	621.612	4%	718.747	5%	16%
Unclassified	1516	0%	89	0%	-94%	41,637	0%	52,002	0%	25%
Government (d)	423,260	13%	419,892	13%	-1%	2,263,564	15%	2,306,723	15%	2%
Government (u)	420,200	1070	410,002	1070	1 70	2,200,004	1070	2,000,720	1070	270
Subtotal	3,220,036	98%	3,275,196	99%	2%	0 14,852,336	100%	15,644,402	100%	5%
Additional Suppressed/Confidential Employment (e)	<u>74,055</u>	<u>2%</u>	42,448	<u>1%</u>	-43%	<u>n/a</u>	<u>0%</u>	<u>n/a</u>	<u>0%</u>	
Total, All Employment	3,294,091	100%	3,317,644	100%	1%	14,852,336	100%	15,644,402	100%	5%

Notes:

Sources: California Employment Development Department, 2008; BAE, 2008.

⁽a) Includes all wage and salary employment covered by unemployment insurance. (b) Represents employment for third quarter, 2002.

⁽c) Represents employment for third quarter, 2007.

⁽d) Government employment includes workers in all local, state and Federal sectors, not just public administration. For example, all public school staff are in the Government category.

⁽e) County employment for some industries were suppressed by EDD due to the small number of firms reporting in the industry for a given county.

Affected Industries

According to the BAAQMD, in 2008, the Bay Area had over 1,100 automotive refinishing facilities, and less than 200 mobile refinishers. As shown in Table 4, the U.S. Census Bureau reported that there were 903 firms in the Automotive Body, Paint, and Interior Repair and Maintenance sector that accounted for between 7,400 and 7,600 jobs in 2006.

The Bay Area had 26 Painting and Coating Manufacturing firms that accounted for between 400 and 800 jobs in 2006. The Painting and Coating Manufacturing sector is not limited to automotive painting and coating. The California Air Resources Board (ARB) identified Ellis Paint as the only painting and coating manufacturing firm in California. Ellis Paint's only manufacturing plant is located in the Los Angeles area. Because there are no auto paint manufacturers in the Bay Area, this report does not estimate the economic impacts to this sector.

Table 4:	Drofile	٥f	Affootod	Industries.	2006
Table 4:	Profile	OT	Affected	industries.	こといいり

			Number of Establishments by Size of Workforce							
NAICS	Industry Description	Employment	1-4	5-9	10-19	20-49	50-99	100-249	250+	Total
325510 811121	Paint and Coating Manufacturing Automotive Body, Paint,and Interior Repair and Maintenance	411 - 1,056 7,418 - 7,567	12 413	4 244	2 156	5 84	1 5	2	(26 903

Sources: US Census; BAE, 2008.

Socio-Economic Impacts

This section discusses the methodology, economic profile of affected industries, annualized compliance costs, and estimates the economic impacts associated with the proposed amendment to Rule 8-45.

Methodology

In order to estimate the economic impacts of amending Rule 8-45 on the affected industries, this report compares the affected industry's annualized compliance costs with its profit ratios. The analysis uses data from the BAAQMD, US Census County Business Patterns, the IRS, and Dun and Bradstreet, a private data vendor.

The BAAQMD identifies the affected industries as Coating Manufacturers (SIC 2851), and Automotive Refinishing Facilities (NAICS 811121/SIC 7532). According to BAAQMD records, no coating manufacturing companies are located in the Bay Area. However, there are over 1,100 automotive refinishing facilities, which include auto body repair shops, automotive paint shops, auto dealerships, public transit agencies, airports, public work departments, and educational facilities. In addition, the District includes an additional 200 mobile automotive refinishers.

Economic Profile of Affected Industries

According to Dun & Bradstreet data, a majority of the firms in the Automotive Refinishing Facilities sector have between one and four employees and average annual sales of approximately \$116,400. As shown in Table 5, the average sales for businesses of all sizes were \$355,783.

Table 5: Top and Body Repair and Paint Shop Sales

# of Employees	Number of Businesses	Average Annual Sales (a)	Average # of employees	Total Sales	Total Employees
1-4	822	\$116,429	2	\$95,713,791	1,601
5-9	186	\$443,100	7	\$82,412,319	1,228
10-19	95	\$945,857	13	\$89,719,371	1,215
20-49	45	\$2,161,936	27	\$96,503,789	1,183
50-99	6	\$2,766,667	53	\$15,437,198	298
100-249	0	n/a	n/a	n/a	n/a
250+	2	\$11,000,000	250	\$20,458,937	465
TOTAL	1,155	\$355,783	5	\$410,929,615	5,988

Notes:

Sources; Dun and Bradstreet, 2008; BAE, 2008

Based on IRS data on total sales and net income for the Automotive Repair and Maintenance sector, firms average a 4.2 percent rate of return on total sales. Table 6 presents the profits for automotive shops of varying sizes based on a 4.2 percent rate of return.

Table 6: Profits of Automotive Refinishing Facilities									
# of Employees	Number of Businesses	Average Annual Sales	Avg. Return on Sales	Average Profits	Total Profits				
1-4	822	\$116,429	4.2%	\$4,867	\$4,001,329				
5-9	186	\$443,100	4.2%	\$18,524	\$3,445,259				
10-19	95	\$945,857	4.2%	\$39,542	\$3,750,731				
20-49	45	\$2,161,936	4.2%	\$90,380	\$4,034,355				
50-99	6	\$2,766,667	4.2%	\$115,661	\$645,354				
100-249	0	n/a	4.2%	n/a	n/a				
250+	2	\$11,000,000	4.2%	\$459,857	\$855,289				
TOTAL	1,155	\$355,783	4.2%	\$14,874	\$17,178,972				

Sources: Dun & Bradstreet; IRS; BAE, 2008.

As Table 6 shows, automotive refinishing facilities have average annual net profits of approximately \$14,874, with profits ranging from \$4,900 to \$459,900, depending on the firm's size.

⁽a) Average annual sales based on a 40 percent sample of the automotive painting businesses in the Bay Area. SIC code 7532 (Top, Body, and Upholstery Repair Shops and Paint Shops)

Description of compliance costs

The BAAQMD's Workshop Report specifies that compliance costs would total \$2.8 million within the District, and would average \$2,320 per facility. However, updated information from the BAAQMD suggests that the actual annualized cost will be between \$950 and \$1,250, averaging \$1,022 per firm. Table 7 shows the annualized compliance costs for automotive refinishing facilities with varying equipment and revenues.

Table 7: Average Annualized Compliance Estimates

Number of Spray Booths	Existing Heating Equipment	Annual Revenues (\$ million)	Average Annualized Costs
One	No	Less than 1.0	\$950
Two	No	Less than 1.0	\$950
Two	No	1.0 to 2.5	\$2,500
Two	Yes	1.0 to 2.5	\$2,500
Two	Yes	More than 2.5	\$2,500
Three	Yes	More than 2.5	\$2,850
Weighted Avera	ge		\$1,022

Sources: BAAQMD; BAE, 2008.

According to the BAAQMD, the total compliance costs should total approximately, \$1.1 million. Using the lower compliance costs for firms with less than \$1.0 million in revenues and firms with at least three booths, \$950, and higher compliance costs of \$1,250 per booth for the remaining firms, results in a total estimated compliance cost of \$1.2 million, a conservative estimate. Table 8 shows estimated total compliance costs.

Table 8: Total Annualized Compliance Costs

# of Employees	Number of Businesses	Average Annual Sales	Average Annualized Compliance Costs	Total Compliance Costs
1-4	822	\$116,429	\$950	\$780,973
5-9	186	\$443,100	\$950	\$176,691
10-19	95	\$945,857	\$950	\$90,112
20-49	45	\$2,161,936	\$2,500	\$111,594
50-99	6	\$2,766,667	\$2,850	\$15,902
100-249	0	n/a	\$2,850	n/a
250+	2	\$11,000,000	\$2,850	\$5,301
Average	1,155	\$355,783	\$1,022	\$1,180,574

Sources: Dun & Bradstreet; IRS; BAE, 2008.

Affected Industry Economic Impact analysis

In order to determine the impacts of facilities of various sizes, this analysis uses average revenue estimates from Dun & Bradstreet, in conjunction with IRS profit ratios, to determine whether BAAQMD's estimated annualized compliance costs would result in profit losses of 10 percent or more. The ARB uses the 10 percent threshold as a proxy for burden, where profit losses greater than 10 percent indicate a potential for significant adverse economic impacts. Table 9 shows the annualized compliance costs as a share of total profits.

Table 9: Total Annualized Compliance Costs as a Share of Profts

# of Employees	Number of Businesses	Total Annual Sales	Total Profits	Total Annualized Compliance Costs	Compliance Costs as a Share of Annual Profits
1-4	822	\$95,713,791	\$4,001,329	\$780,973	19.5%
5-9	186	\$82,412,319	\$3,445,259	\$176,691	5.1%
10-19	95	\$89,719,371	\$3,750,731	\$90,112	2.4%
20-49	45	\$96,503,789	\$4,034,355	\$111,594	2.8%
50-99	6	\$15,437,198	\$645,354	\$15,902	2.5%
100-249	0	n/a	n/a	n/a	n/a
250+	2	\$20,458,937	\$855,289	\$5,301	0.6%
Average	1,155	\$410,929,615	\$16,732,317	\$1,180,574	7.1%

Sources: Dun & Bradstreet; IRS; BAE, 2008.

Overall, annualized compliance costs represent approximately 7.1 percent of profits, well below the 10 percent threshold. However, for the smallest firms with incomes under \$1.0 million and one to four employees, the annualized compliance costs could be as high as 19.5 percent of profits, much higher than the ARB's 10 percent threshold.

According to the ARB's statewide economic impact analysis for the Automotive Coatings Suggested Control measure, automotive refinishing facilities should be able to pass the costs along to customers, and estimates an average increase of \$11 per \$2,200 in repairs. Since the increase to customers represents less than a one percent increase in costs, and since customers are unlikely to leave the region for these services, ARB determined that it is reasonable to assume that affected firms would be able to pass these costs along to consumers.

On the other hand, if businesses were not able to pass the costs along to consumers, some businesses would be able to absorb the costs, while others would need to find other means for mitigating the economic impacts. Although many of the businesses would experience impacts falling at or below the ten percent threshold, the vast majority, 71 percent, could anticipate impacts ranging up to 19.5 percent of profits. These businesses would either need to adopt higher value products or processes to increase profits, or shut down. Table 10 shows the necessary increase per \$2,200 repair charge that businesses would need to charge to fully mitigate Rule 8-45's economic impacts.

Table 10:	Average	Consumer	Cost	Increases

# of Employees	Number of Businesses	Total Annual Sales	Average Number of Repairs	Total Annualized Compliance Costs	New Total Annual Sales	Average Consumer Cost Increase (a)
1-4	822	\$95,713,791	43,506	\$780,973	\$96,494,764	\$18
5-9	186	\$82,412,319	37,460	\$176,691	\$82,589,010	\$5
10-19	95	\$89,719,371	40,782	\$90,112	\$89,809,484	\$2
20-49	45	\$96,503,789	43,865	\$111,594	\$96,615,384	\$3
50-99	6	\$15,437,198	7,017	\$15,902	\$15,453,100	\$2
100-249	0	n/a	n/a	n/a	n/a	n/a
250+	2	\$20,458,937	9,300	\$5,301	\$20,464,238	\$1
Average	1,155	\$410,929,615	186,786	\$1,180,574	\$401,425,979	\$6

Note:

(a) This represents the maximum consumer price increase needed to fully mitigate economic impacts related to Rule 8-45.

Sources: Dun & Bradstreet; IRS; BAE, 2008.

As Table 10 shows, businesses would need to increase consumer costs between one dollar and \$18, in order to fully recoup annualized compliance costs, with an average increase of six dollars. These increases represent an upper bound on consumer impacts, as only the smallest businesses would need to pass along costs to consumers in order to fall within the 10 percent impact on profits

threshold. In addition, to the extent that some of the firms will have lower annualized compliance costs, consumer prices will need to increase less than the amounts shown in Table 10.

Increasing consumer costs by six dollars per \$2,200 repair results in a 0.3 percent increase. For the smallest businesses, an \$18 per \$2,200 repair increase would result in a 0.8 percent increase. As insurance companies often pay for auto repairs, they would most likely bear the heaviest direct burden. However, higher repair costs could be reflected in slightly higher consumer insurance premiums.

Affected Industry and Regional Employment Impacts

Since on average, the proposed Rule amendment would not result in significant economic impacts to firms within the affected industries, and consumers and insurance companies will likely bear the compliance cost burden, amending the Rule would not impact the affected industry or regional employment.

Regional Indirect and Induced Impacts

Indirect and induced impacts refer to regional multiplier effects of increasing or decreasing regional economic activity. If the Rule were to significantly impact local businesses, any closures would result in direct regional economic losses. Firms would no longer buy goods from local suppliers, thereby resulting in reduced indirect impacts, or business-to-business expenditures. In addition, firms would no longer employ regional residents, resulting in reduced induced impacts, or household spending.

However, since the proposed amendment to the Rule is not expected to result in significant direct impacts, its adoption would not result in any indirect or induced impacts either.

Impact on Small Businesses

According to California Government Code 14835, a small business is any business that meets the following requirements:

- Must be independently owned and operated;
- Cannot be dominant in its field of operation;
- Must have its principal office located in California;
- Must have its owners (or officers in the case of a corporation) domiciled in California; and
- Together with its affiliates, be either:
 - A business with 100 or fewer employees, and an average annual gross receipts of \$10 million or less over the previous three tax years, or
 - o A manufacturer with 100 or fewer employees.

Using these definitions, approximately 99.8 percent of all affected firms are small businesses. This analysis has shown that firms with lower revenues will experience higher impacts on return on profits as a result of the proposed amendment to the rule.

However, as the ARB and this analysis both assume that compliance costs of one dollar to \$18 per \$2,200 average repair charge are small enough to pass along to consumers without impacting the firms' competitiveness, the amendment of Rule 8-45 would not adversely impact small businesses. In addition, on average, the impacts of the proposed Rule amendment fall under the ARB's 10 percent threshold, which indicates that the proposed amendment would not adversely impact firms.